

Serial No. 09/756,997

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providing a semiconductor wafer having a photoresist layer formed thereon;

exposing, baking and developing the photoresist layer to produce a patterned photoresist mask; and

heating the wafer for a time sufficient to reach a temperature in a 100-400°C range and without cooling it, and then rinsing the wafer with deionized water at a temperature equal to or higher than the room temperature.

2. (Amended) The method of claim 1 wherein the semiconductor wafer comprises silicon.

3. (Amended) The method of claim 2 wherein said step of heating the silicon wafer includes a step of post-development bake performed after said development step.

4. (Amended) The method of claim 3 wherein the silicon wafer is immediately rinsed after said bake step.

6. (Amended) A method for eliminating polymer blobs in a photoresist mask formed at the surface of a semiconductor wafer, comprising the steps of:

providing a semiconductor wafer having a photoresist layer formed thereon;

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exposing, baking and developing the photoresist layer to produce a patterned photoresist mask, and then rinsing the wafer with deionized water (DIW) having a temperature in a range of 40-60°C.

7. (Amended) The method of claim 6 wherein the semiconductor wafer comprises silicon.

9. (Amended) A method for eliminating polymer blobs in a photoresist mask formed at the surface of a semiconductor wafer, comprising the steps of:

providing a semiconductor wafer having a photoresist layer formed thereon;

exposing, baking and developing the photoresist layer to produce a patterned photoresist mask; and then

submitting the wafer to an extra rinse with deionized water at a temperature in a 40-60°C range.

10. (Amended) The method of claim 6 wherein the semiconductor wafer comprises silicon.

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